

Amendments To The Specification:

In the substitute specification document, please delete paragraph [0002].

In the amended specification document, please delete the section heading --SUMMARY OF THE INVENTION-- at page 1, before paragraph [0003].

In the substitute specification document, please add the section heading at page 3, before paragraph [0012], as follows:

--SUMMARY OF THE INVENTION--.

In the substitute specification document, please amend paragraph [0018], at page 5 as follows:

Advantageously the surface quality of non-rotating elements of the turbine machine can also be monitored in this way. For example means arranged distributed over the circumference of the turbine machine for emitting at least one electromagnetic wave can be used, with an arrangement being able to be provided to meet particular requirements. Accordingly receive means can be provided to receive reflected electromagnetic waves. In order to reduce the effort involved in operating such an arrangement, provision can be made for example for operation of the arrangement in pulse mode and/or in time division multiplex mode. ~~In~~ An addition provision can also be made for a means for emitting at least one electromagnetic wave to be simultaneously also used for receiving, with this being arranged on the housing in the area of the turbine blades to be monitored.

In the substitute specification document, please amend paragraph [0026], at page 7 as follows:

Advantageously the vibration status of non-rotating elements of the turbine machine can also be monitored in this way. For example means arranged distributed over the circumference of the turbine machine for emitting at least one electromagnetic wave can be used, with an arrangement being able to be provided to meet particular requirements. Accordingly receive means can be provided to receive reflected electromagnetic waves. In order to reduce the effort involved in operating such an arrangement, provision can be made for example for operation of the arrangement in pulse mode and/or in time division multiplex mode. ~~In~~ An addition provision

can also be made for a means for emitting at least one electromagnetic wave to be simultaneously used for receiving, with this being arranged on the housing in the area of the guide vanes to be monitored.

In the substitute specification document, please amend paragraph [0044], at page 11 as follows:

In this case f_0 is the frequency of the at least one emitted wave 31, $v(t)$ the relative speed of the surface of the turbine blades 4 and guide vanes 11 reflecting the at least one electromagnetic wave 31 in relation to the antenna 8 and c_0 the speed of propagation of the at least one electromagnetic wave 31, 32.

In the substitute specification document, please amend paragraph [0047], at page 13 as follows:

Basically the antennas 81, 82 and 83, in addition to the active operating mode described here, i.e. with explicit emission of at least one electromagnetic wave 31, can also be operated passively for the purpose of recording the turbine blades 4 and/or the guide vanes 11. In passive mode the antennas 81, 82 and 83 do not emit any send radiation, but only receive electromagnetic radiation which is present in the turbine channel 6, especially also as a result of defects in the turbine blades 4 and/or in the guide vanes 11. The antennas 81, 82 and 83 are then also exclusively intended for "listening".

In the substitute specification document, please delete pages 15 - 19.